B. Hyland

DEC 21 2017

MOVE YOUR ENVIRONMENT FORWARD

December 20, 2017

USEPA – Region 3
Air Protection Division
1650 Arch Street
Philadelphia, PA 19103-2029

RE: NSPS SUBPART OOOOa ANNUAL REPORT FOR THE EM ENERGY PA LLC'S CRATTY WELL PAD LOCATED AT 295 SANDY POINT ROAD, EMLENTON, PENNSYLVANIA (HRP #EDG4001.AC)

To Whom It May Concern:

HRP Associates Inc. (HRP) on behalf of EM Energy PA LLC is submitting this New Source Performance Standards (NSPS) Subpart OOOOa Report for the Cratty Well Pad, located at 295 Sandy Point Road, Emlenton, Pennsylvania. The facility is required to submit an annual report as required by 40 CFR 60.5420a for the compliance period of September 24, 2016 through September 23, 2017.

Please note at the time of submission of this report, the Subpart OOOOa annual reports are allowed to be submitted via hard copy because this report submission is within 90 days of the final template posted in CEDRI.

The certificate of Truth, Accuracy, and Completeness is included as Attachment 1.

Completions:

No well completion activities occurred during the reporting period.

Centrifugal Compressors:

There were no centrifugal compressors on site during this period.

Reciprocating Compressors:

The reciprocating compressor located on site is not considered an affected facility because it is located on the wellpad.

Pneumatic Controllers:

There were no pneumatic controllers on site during this period.

Storage Tanks:

The wellpad consists of two (2) condensate storage tanks and two (2) brine storage tanks. Each tank's potential emissions exceed 6 tons VOC per year and as a result, are considered an affected facility under Subpart OOOOa.

(i) Location of tanks:
- Condensate Tank 1 – 41.15767 N / -79.74716 E

- Condensate Tank 2 – 41.15767 N / -79.74716 E
- Brine Tank 1 – 41.15762 N / -79.74716 E
- Brine Tank 2 – 41.15762 N / -79.74711 E

(ii) See Attachment 2 for VOC emission rates calculated using the API E&P TANKS model.
(iii) No deviations occurred during the reporting period.
(iv) The facility currently operates a LEED Fabrication 48" Enclosed Combustor with a 98% VOC destruction efficiency. The tanks are also equipped with a certified closed vent system.
(v) No tanks were removed from service during the reporting period.
(vi) No tanks returned to service during the reporting period.
(vii) See next section for information regarding the control device

Storage Tank Control Device:

There are two enclosed combustors used to control VOC emissions from the storage tanks on the wellpad. Below is information pertaining to the device:

- LEED Fabricator 48" Enclosed Combustor
- Serial Number - 80486
- See Attachment 3 for copy of purchase order
- Location: 41.15796 N / -79.74724E
- Inlet gas flow rate – 140 Mscfd
- Upstream of the enclosed combustor has an Emergency Shutdown Valve (ESD) that will shut off gas flow to the control device anytime the pilot light is not lit
- Visible emissions were not observed during the reporting period
- No maintenance or repairs occurred during the reporting period
- The manufacturer's written operating instructions, procedures, and maintenance procedures can be found in Attachment 4

Fugitive Emission Survey

- Date of Survey: September 11, 2017
- Beginning Time of Survey: 9:45am
- End Time of Survey: 11:15am
- Name of Operator Performing survey: Melissa Sullivan – 5+ years of FLIR experience, Montrose Certified Operator, ITC FACT Certified Operator, and ITC Certified Infrared Thermograph certified in Optical Gas Imaging exp. 6/14/2022
- Ambient Temperature: 60 F
- Sky Conditions: Cloudy
- Maximum Wind Speed: 1.5 mph
- Monitoring Instrument Used: FLIR GF 320
- The only identified deviation was that the beginning and end times were not noted on the final LDAR report. Measures have been taken to ensure the start and end times are included on future LDAR reports.
- No monitored components were leaking

If you have any questions, comments, or require any additional information, please feel free to contact the undersigned at (518) 877-7101 extension 112.

Sincerely,
HRP Associates, Inc.

Brandon Cooper, EIT
Senior Project Engineer

Thomas S. Seguljic, P.E.
Vice President

Attachments:

Attachment 1: Certificate of Truth, Accuracy, and Completeness
Attachment 2: Tank Emission Calculations
Attachment 3: Control Device Purchase Order
Attachment 4: Enclosed Combustor Installation, Operation & Maintenance Manual

Cc: PADEP – Oil and Gas Division, Meadville, PA
Kay Thomas – EM Energy PA LLC, Canonsburg, PA